

# Work Order ID 48497-1

October 7, 2009 11:39:34 AM



Page 1

Item ID: D3213-1

Accept



Setup Start



Revision ID: A

Stop



Item Name: Door Panel

Start Date: 10/07/09 Start Qty: 10.00



Cust Item ID:

Required Date: 10/09/09 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3213

Rev A

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3213  
Deburr if necessary

Dwg Rev: \_\_\_\_\_ Prog Rev: \_\_\_\_\_ 2-



110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control



120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

2) 8/09/07/02



# Work Order ID 48497-1

October 7, 2009 11:39:34 AM



Page 2

Item ID: D3213-1  
Revision ID: A  
Item Name: Door Panel

Accept



Setup Start



Stop



Start Date: 10/07/09 Start Qty: 10.00



Required Date: 10/09/09 Req'd Qty: 10.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



Small Fab

Small Fab

Small Fab

Memo  
Debur

2/AS

0.00

0.00

140



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

BL 09-10-7

0.00

0.00

10

150



QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

9/1 09/10/07

210

10

# Work Order ID 48497-1

October 7, 2009 11:39:34 AM



Page 3

Item ID: D3213-1  
Revision ID: A  
Item Name: Door Panel

Accept



Setup Start



Stop



Start Date: 10/07/09 Start Qty: 10.00  
Required Date: 10/09/09 Req'd Qty: 10.00



Cust Item ID:  
Customer:

Reference:

Approvals: Process Plan:  
QC:

Date:  
Date:

Tooling:  
SPC (Y/N):

Date:  
Date:

Run Start  
Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160



Packaging

Packaging

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00

Memo

0.00

9/10/4

QOX SP

170



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

09/10/08

MF 09-10-08

Picklist Print

October 7, 2009 11:39:33 AM

Work Order ID: 48497-1

Parent Item: D3213-1RevA

Parent Item Name: Door Panel



Comments:

Start Date: 10/07/09

Required Date: 10/09/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
✓ M2024T3S.063  2024-T3 .063 sheet		Purchased	No			100	sf	58.9696	4.9621 			

Warehouse Loc Qty Loc Code

Location

Main Warehouse

MAT

58.96962419

102942

1.5

105916

3.69

106223

1.47

109463

0.00947368

110980

5.4854

111787

44.8147505

19059

2

Date: Thursday, 11/06/2009 11:55:53 AM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : DOOR ASSEMBLY
<b>Job Number</b> : 48497	
<b>Estimate Number</b> : 10711	
<b>P.O. Number</b> :	<b>Part Number</b> : D32131
<b>This Issue</b> : 11/06/2009 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3213
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : / / <b>Type</b> : SMALL /MED FAB	<b>Drawing Revision</b> : A
<b>Previous Run</b> : 44232	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 19/06/2009 <b>Qty:</b> 10 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>JUD 09-06-11</u>	
<b>Comment</b> : Est Rev:A 05-11-17 New Issue JLM	
Est Rev:B 07-02-13 Now on Waterjet JLM	
Est Rev C: 08.11.26 Comment added to step 2 KJ Verified by:	
EC	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
----------------	------------------------------	----------------------

1.0	M2024T3S063	2024-T3 .063 sheet
-----	-------------	--------------------



**Comment:** Qty.: 0.4950 sf(s)/Unit Total : 4.9497 sf(s)  
 Material: 2024-T3 (QQ-A-250/4) 0.063" thick  
 (M2024T3S.063)Identify as D3213-1  
 Batch: 111678 IB 9-7-2

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



**Comment:** FLOW WATER JET  
 1-Cut as per Dwg D3213  
 Dwg Rev: A  
 Prog Rev: A

IB 9-7-2

(10)

2-Deburr if necessary

IB 9-7-2

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--

**Comment:** INSPECT PARTS AS THEY COME OFF MACHINEIB 9-7-2

4.0	QC8	SECOND CHECK
-----	-----	--------------

**Comment:** SECOND CHECK507/07/02 (10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 11/06/2009 11:55:53 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOOR ASSEMBLY

Job Number: 48497

Part Number: D32131

Job Number:



Seq. #: Machine Or Operation: Description :

5.0 ✓ SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
Deburr

6.0 ✓ HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1  
Chemical Conversion Coat as per QSI 005 4.1

7.0 ✓ QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

8.0 ✓ PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1  
Identify and Stock  
Location: \_\_\_\_\_

9.0 ✓ QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



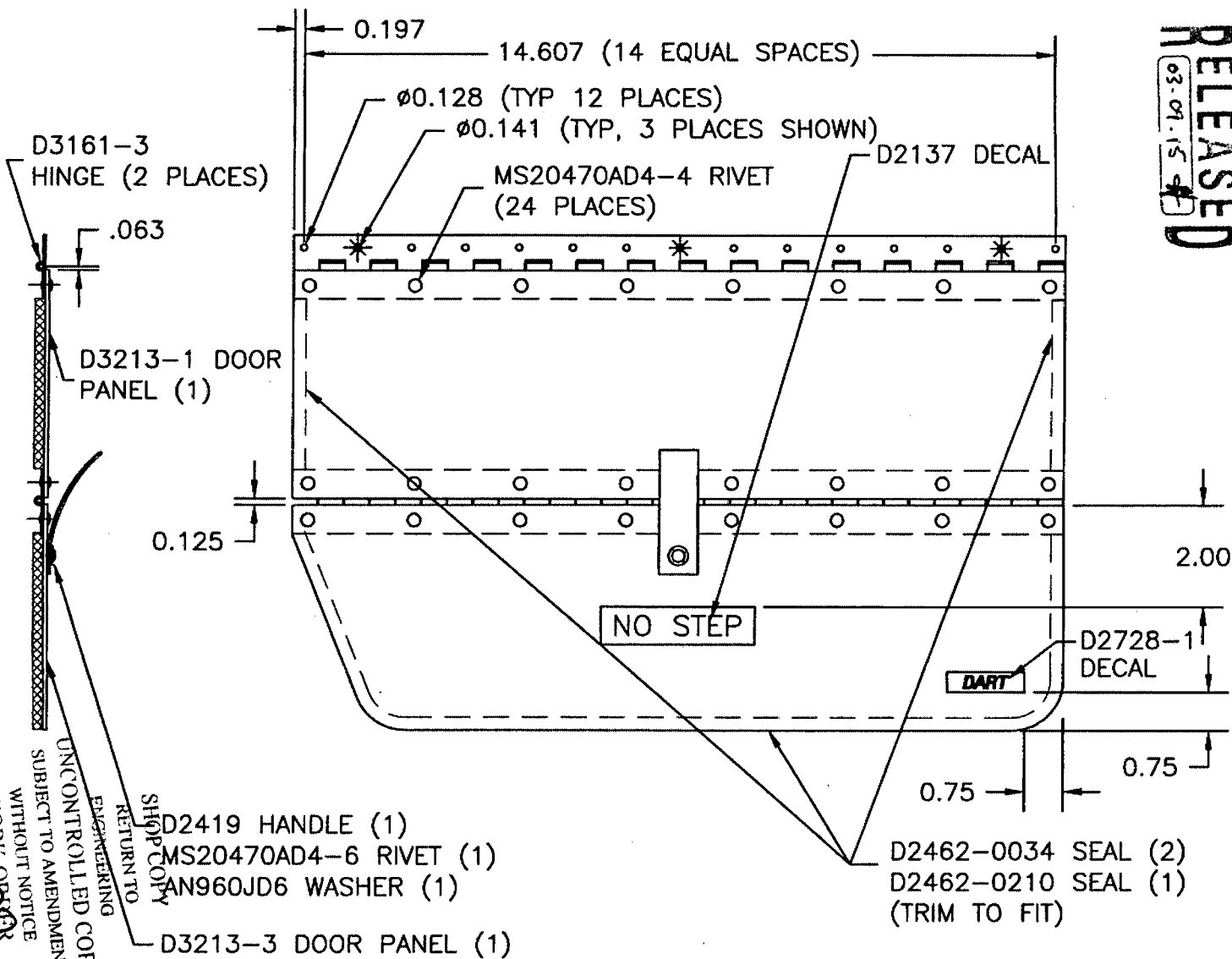


**DART**



DESIGN	CH	DRAWN BY	CH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	✓	APPROVED	✓	DRAWING NO.	D3213
DATE	03.09.03	TITLE	DOOR ASSEMBLY	REV. A	1 OF 2
A	03.09.03	NEW ISSUE		SCALE	1:3

RELEASED  
03-01-15



**D3213-041 DOOR ASSEMBLY**

FOLD AND FASTEN D2419 TO FORM 2.5" LONG HANDLE

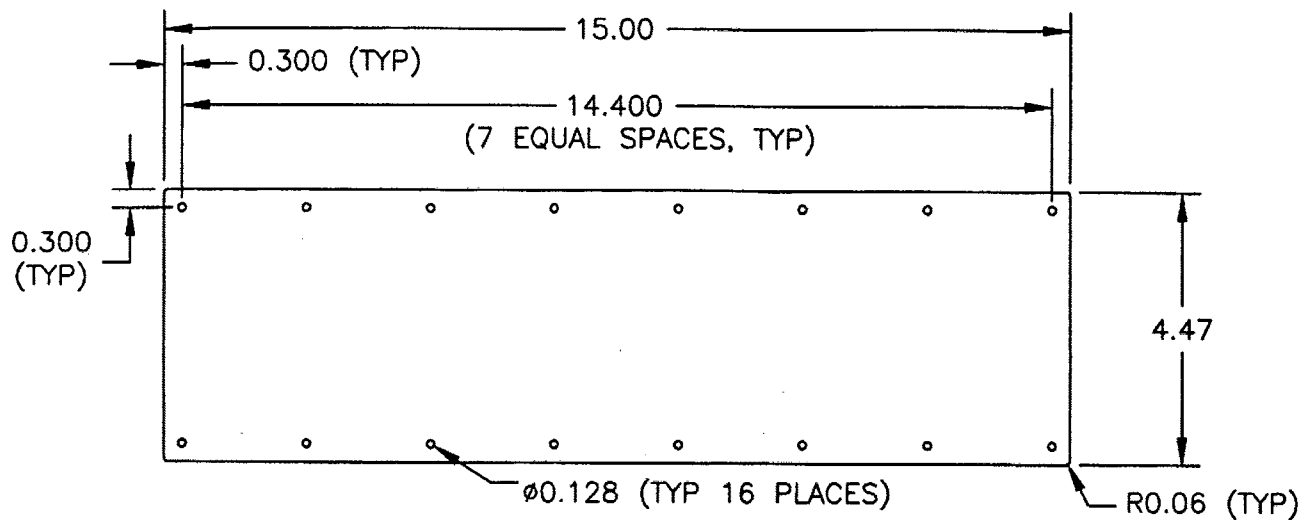
FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3

INSTALL D2137 DECAL, D2419 HANDLE, AND D2462 SEAL AFTER POWDER COAT

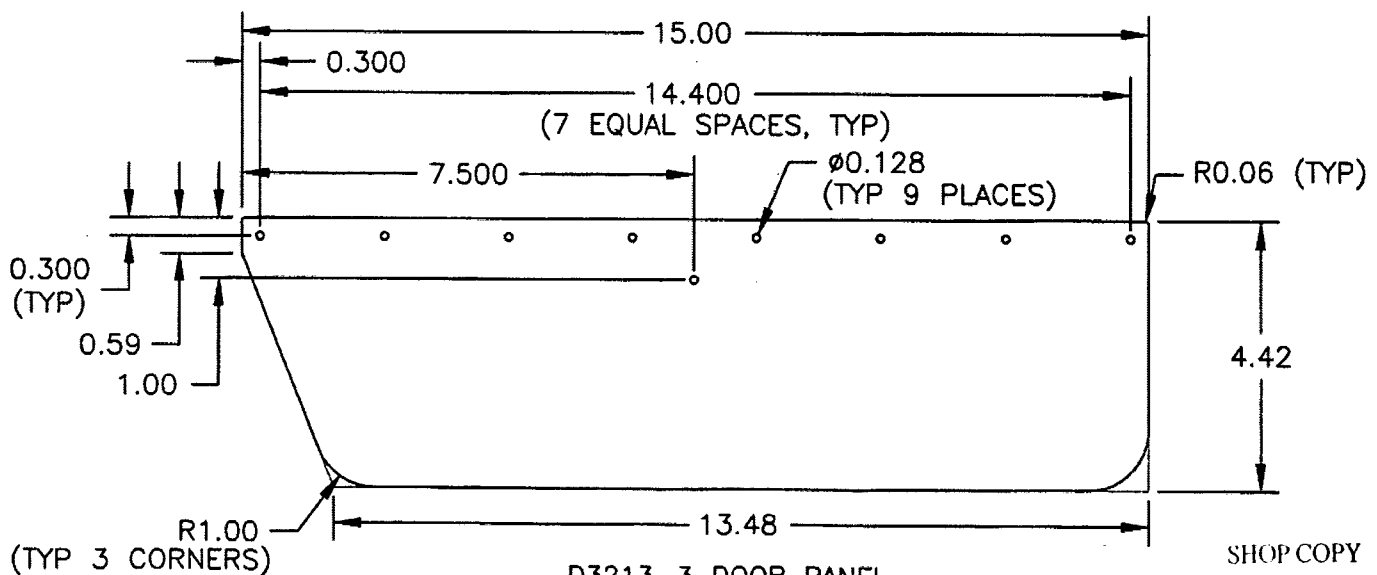
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3213	REV. A 2 OF 2
DATE 03.09.03		TITLE DOOR ASSEMBLY	SCALE 1:3



D3213-1 DOOR PANEL



D3213-3 DOOR PANEL

SHOP COPY  
RETURN TO  
ENGINEERING

D3213-1 AND D3213-3

MATERIAL: 2024-T3 (QQ-A-250/4) SHEET 0.063 THICK

FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED  
03.09.15  
CONTROLLED COPY  
NOTICE  
WORK ORDER  
NO. 48491

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**Work Order ID 48497**

Friday, June 26, 2009 8:46:05 AM

Page 1

Item ID: D31131 -Accept

Revision ID: B

Item Name: Spring

Start Date: 7/15/2009 Start Qty: 10.00

Required Date: 8/3/2009 Req'd Qty: 10.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3113	Rev B

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D ☐ Dwg Rev: A ☐ Prog Rev: A ☐ 2-Deburr if necessary

IB 9-7-2

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

IB 9-7-2

(10)

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

=&gt; 50267/02 (x10)

**Work Order ID 48497**

Friday, June 26, 2009 8:46:05 AM



Page 2

Item ID: D3113-1

Accept



Setup Start



Revision ID: B

Stop



Item Name: Spring

Start Date: 7/15/2009 Start Qty: 10.00



Cust Item ID:

Required Date: 8/3/2009 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

Identify as per dwg &amp; Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

# Picklist Print

Page 1

Friday, June 26, 2009 8:46:04 AM

Work Order ID: 48497



Parent Item: D3113-1RevB



Parent Item Name: Spring



Start Date: 7/15/2009

Required Date: 8/3/2009

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M304S16GA 		Purchased	No			100	sf	0.0000	0.5263 			
304/316 Sheet .063												

m 111878 9-7-2

# Work Order Summary

October 7, 2009 11:25:47 AM

Page 1 of 1

Criteria : Work Order ID: 48497 Item ID: D3113-1RevB Product Family PURCHASED ITEMS  
 Work Order Start Dates 7/15/09 to 7/15/09 11:59:59 PM Work Order Required Dates 8/03/09 to 8/03/09  
 11:59:59 PM

All References

Work Order Status Released

Work Order ID 48497 Required Qty 10.0000 Status Code Released  
 Item ID D3113-1RevB Accepted Qty 0.0000 Scrap Qty 0.0000  
 Item Name Spring  
 Current Acct Value \$3.662 Sales Order ID

Start Date	7/15/09	Required Date	8/03/09	Completed Date	
Standard	** Actual **	** Acct. Value **	** Variance **	** Variance % **	
<b>Direct Costs</b>	<b>Total</b>	<b>Each</b>	<b>Each</b>	<b>Each</b>	<b>Each</b>
Material	\$0.000	\$0.000	\$0.262	\$0.262	100.00%
Labor	\$45.050	\$0.000	\$1.040	\$1.040	100.00%
Outplant	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
Variable Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
Fixed Burden	\$151.708	\$0.000	\$2.350	\$2.350	100.00%
Material Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
<b>** Total **</b>	<b>\$196.759</b>	<b>\$0.000</b>	<b>\$3.652</b>	<b>\$3.652</b>	

## Work Center

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
BLEC01		7/02/09										
N/A			0.00	0.00	1.00	1.00	1.00	\$0.000	\$16.850	\$41.870	\$0.000	\$58.72
<b>Total:</b>			0.00	0.00	1.00	1.00	1.00	\$0.000	\$16.850	\$41.870	\$0.000	\$58.72

## Work Center Waterjet

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
BLEC01		7/02/09										
100			0.00	0.00	1.67	1.67	1.00	\$0.000	\$28.200	\$109.838	\$0.000	\$138.03
<b>Total:</b>			0.00	0.00	1.67	1.67	1.00	\$0.000	\$28.200	\$109.838	\$0.000	\$138.03